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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

04/30/2004

Crowell & Moring PO Box 14300 Washington, DC 20044-4300

**EXAMINER** TRAN, THIEN F

ART UNIT

PAPER NUMBER

2811

DATE MAILED: 04/30/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019.056	04/22/2002	Kiyoshi Demizu	155/50674	1734

TITLE OF INVENTION: SEMICONDUCTOR WAFER AND DEVICE FOR SEMICONDUCTOR DEVICE MANUFACTURING PROCESS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	07/30/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing n applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility t ensure timely payment f maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this f rm, together with applicable fee(s), to: Mail

Mail St p ISSUE FEE C mmissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 r <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 7590 04/30/2004 Certificate of Mailing or Transmission Crowell & Moring I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. PO Box 14300 Washington, DC 20044-4300 (Depositor's name (Signature (Date CONFIRMATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 155/50674 1734 10/019.056 04/22/2002 Kiyoshi Demizu TITLE OF INVENTION: SEMICONDUCTOR WAFER AND DEVICE FOR SEMICONDUCTOR DEVICE MANUFACTURING PROCESS DATE DUE **ISSUE FEE PUBLICATION FEE** TOTAL FEE(S) DUE APPLN. TYPE SMALL ENTITY 07/30/2004 \$1330 \$300 \$1630 NO nonprovisional CLASS-SUBCLASS **ART UNIT EXAMINER** 257-048000 2811 TRAN, THIEN F Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form attorneys or agents. If no name is listed, no name TO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity government 4b. Payment of Fee(s): 4a. The following fee(s) are enclosed: A check in the amount of the fee(s) is enclosed. ☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_\_(enclose an extra copy of this form). ☐ Advance Order - # of Copies \_ Deposit Account Number Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Date) (Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents. Alexandria, Virginia 22313-1450. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,056	04/22/2002	Kiyoshi Demizu	155/50674	1734
75	590 04/30/2004		EXAMINER	
Crowell & Morin	g		TRAN, THIEN F	
PO Box 14300 Washington, DC 20	0044-4300		ART UNIT	PAPER NUMBER
washington, DC 20	0011-1500		2811	
			DATE MAILED: 04/30/2004	<b>,</b>

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 78 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 78 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)	
	10/019,056	DEMIZU ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Thien F Tran	2811	Pro
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED i ) or other appropriate comm RIGHTS. This application is	in this application. If not include nunication will be mailed in due o	d course. <b>THIS</b>
1. This communication is responsive to <u>02/20/2004</u> .			
2. X The allowed claim(s) is/are <u>17-35</u> .			
3. The drawings filed on are accepted by the Examine	er.		
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority units a)  All b)  Some* c)  None of the: <ol> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* Certified copies not received:</li> </ul>	e been received. e been received in Applicati	on No	ion from the
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDON! THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the req	uirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be subn INFORMAL PATENT APPLICATION (PTO-152) which giv</li> </ol>			OTICE OF
6. CORRECTED DRAWINGS ( as "replacement sheets") mu  (a) including changes required by the Notice of Draftsper  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner  Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	son's Patent Drawing Revie  - 's Amendment / Comment o  1.84(c)) should be written on t the header according to 37 C	or in the Office action of the drawings in the front (not the FR 1.121(d).	
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT</li> </ol>			ote the
Address and all			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Notice of I	nformal Patent Application (PTC	)-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		Summary (PTO-413),	
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/		./Mail Date s Amendment/Comment	
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	Statement of Reasons for Allov	wance
of Biological Material	9. 🔲 Other		
-		Their long	
	PR	THIENTRAN IMARY EXAMINER	

### **DETAILED ACTION**

## Allowable Subject Matter

Claims 17-35 are allowed.

The following is an examiner's statement of reasons for allowance: prior art references do not teach or render obvious a semiconductor wafer having the structure as claimed in claims 17, 18 and 22.

Prior art references do not teach or render obvious a method for processing a semiconductor wafer comprising all the steps as claimed in claim 24 and claim 26.

Prior art references do not teach or render obvious an apparatus for fabricating semiconductor devices so as to have varying contact surface densities between the wafer and the surface of the wafer holding means in a direction of the wafer diameter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien F Tran whose telephone number is (571) 272-1665. The examiner can normally be reached on 8:30AM - 5:00PM Monday through Friday.

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Art Unit: 2811

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt April 26, 2004

THIENTRAN
PRIMARY EXAMINER